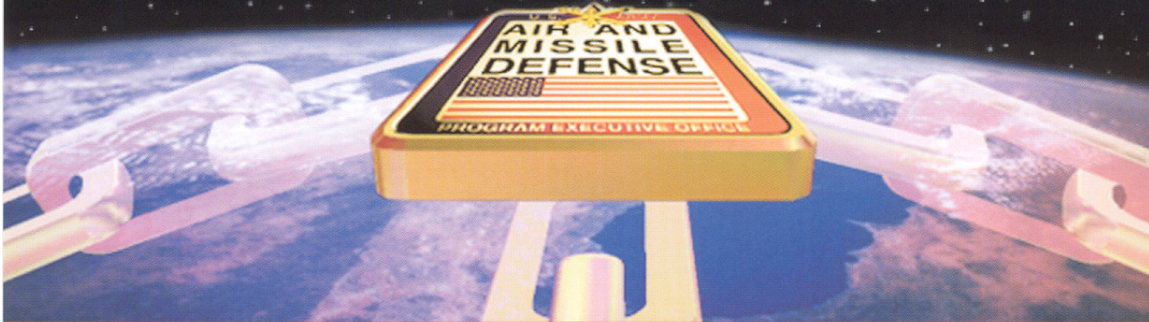


United States Army
**Program Executive Office
Air and Missile Defense**
Huntsville, Alabama



SHORAD

C-130 / C-141 Deployable

Highly Maneuverable

*Provides Maneuver Commander
with Low-Altitude Air Defense*

*Fully Integrated Into the
Digitized Battlefield*

Homeland Defense Applications



**SHORAD "System of Systems" Provides the U.S. Army the Ability To Defeat
Air Targets Threatening Critical Assets and the Maneuver Commanders**



United States Army Program Executive Office Air and Missile Defense



Huntsville, Alabama

February 2002

Short Range Air Defense (SHORAD)

Introduction

The threat posed by Unmanned Aerial Vehicles (UAVs), cruise missiles, and rotary-wing and fixed-wing aircraft has grown rapidly over the last 10 years. SHORAD systems are the only systems available to provide the maneuver commanders with low-altitude air defense in the forward areas.

The primary weapon available today to fulfill this ground-based air and missile defense mission is the STINGER missile and its associated launch platforms [Avenger, Linebacker, and Manportable Air Defense System (MANPADS)]. The STINGER missile is also fielded to the Kiowa Warrior (OH-58D), to provide an air-to-air capability against aerial targets. It is being integrated and tested on the Apache Longbow (AH-64D), and evaluated for use on the Comanche (RAH-66).

The STINGER missile and weapons platforms are deployed in conjunction with the Sentinel radar and the Forward Area Air Defense Command and Control (FAAD C2) Engagement Operations Tactical Operations Center (TOC). This synergistic mix of sensors, C2, and weapons systems provides the maneuver commander with: information superiority, precision/digitally cued engagement, precise three-dimensional targeting, and full-dimensional protection against ground and air targets.

Because of their versatility and maneuverability, SHORAD systems have been used in Homeland Defense applications.

Mission

The Army's air and missile defense mission is to protect the force and selected geopolitical assets from aerial attack, missile attack, and surveillance. SHORAD, as a subset of air and missile defense, protects the maneuver force and other critical assets against UAVs, cruise missiles, and rotary-wing and fixed-wing aircraft in the near term and against an expanded threat set, which encompasses the above, plus rockets, artillery, and mortar projectiles in the future.

System Description

Today's STINGER-based SHORAD forces are highly deployable and provide the shoot-on-the-move capability and mobility necessary to support the maneuver force. The SHORAD system has four basic components: missile, launch platforms, Sentinel radar, and the FAAD C2 TOC.

STINGER, a fire-and-forget infrared/ultraviolet (IR/UV) missile system, is mounted on a variety of platforms and is the only air defense weapon in the forward area. STINGER has been fielded on MANPADS, Avenger, Kiowa Warrior (OH-58D), Special Operation Black Hawks (MH-60), Bradley Linebacker, and the U.S. Marine Corps' Light Amphibious Vehicle-Air Defense.

Sentinel is an advanced, three-dimensional battlefield X-band air defense phased-array radar, with an acquisition range of 40 km. Sentinel transmits its radar imagery to the FAAD C2 via RF link. The FAAD C2 engagement operations TOC provides digital, automated, real-time early warning and cueing information to SHORAD weapon systems, friendly aircraft identification, and air battle management.

For more information, please contact:

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